

# Prof. GÜZİN CANDAN GÜLTEKİN

## Personal Information

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## International Researcher IDs

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Publons / Web Of Science ResearcherID: ABA-1264-2020

ScopusID: 6506950726

Yoksis Researcher ID: 6495

## Education Information

Doctorate, Middle East Technical University, Graduate School of Natural and Applied Sciences, Biochemistry, Turkey  
1987 - 1991

Postgraduate, Middle East Technical University, Graduate School of Natural and Applied Sciences, Biyokimya (YI) (Tezli),  
Turkey 1984 - 1987

Undergraduate, Middle East Technical University, Faculty of Arts and Sciences, Department of Biology, Turkey 1979 -  
1984

## Dissertations

Postgraduate, Isolation, identification and characterization of non-Saccharomyces and Saccharomyces yeasts in  
traditional wines made from five different national grapes in Turkey, Middle East Technical University, Faculty of  
Engineering, Department of Food Engineering, 2019

## Research Areas

Health Sciences, Agricultural Sciences, Engineering and Technology

## Academic Titles / Tasks

Professor, Middle East Technical University, Faculty of Engineering, Department of Food Engineering, 1991 - Continues

## Academic and Administrative Experience

Head of Department, Middle East Technical University, Faculty of Engineering, Department of Food Engineering, 2021 -  
Continues

## Courses

Food Plant Sanitation, Undergraduate, 2022 - 2023

## Advising Theses

- GÜLTEKİN G. C., The effects of sequential inoculation of non-saccharomyces and saccharomyces yeasts from spontaneously fermented grape must varieties on kalecik karasi wine and molecular characterization of saccharomyces and lachancea thermotolerans isolates, Postgraduate, G.PINAR(Student), 2021
- GÜLTEKİN G. C., Interaction of intestinal microbiota and intestinal epithelial health in high carbohydrate diet, Doctorate, M.SEFA(Student), 2021
- GÜLTEKİN G. C., Molecular identification of wild non-saccharomyces yeasts from wine by pcr-rflp and strain differentiation by rapd, Postgraduate, N.Allahyari(Student), 2020
- GÜLTEKİN G. C., Utilization of whey powder in the encapsulation of Lactobacillus acidophilus by spray drying for the production of probiotic yogurt, Postgraduate, C.DEĞİRMENÇİ(Student), 2017
- GÜLTEKİN G. C., Physiological traits of Saccharomyces cerevisiae strains isolated from traditional wines in Turkey, Postgraduate, Ç.ÇAVDAROĞLU(Student), 2017
- GÜLTEKİN G. C., Molecular identification and probiotic properties of Lactobacillus acidophilus group isolates from Turkish kefir, Postgraduate, Ş.GÜLEL(Student), 2014
- GÜLTEKİN G. C., Gültekin G., Molecular identification and probiotic properties of 'lactobacillus acidophilus group' isolates from Turkish kefir/, Postgraduate, Ş.Gülel(Student), 2014
- GÜLTEKİN G. C., Gültekin G., The Development of molecular genetic tools for detection of Salmonella pathogen, Doctorate, K.Gökdoğan(Student), 2012
- GÜLTEKİN G. C., Gültekin G., Survival of probiotic microorganisms during storage after marketing, Postgraduate, I.Köse(Student), 2011
- GÜLTEKİN G. C., Development of PCR methods for detection and quantification of genetically modified maize, Doctorate, H.Jabbari(Student), 2010
- GÜLTEKİN G. C., Development of analysis methods for cry1ac and sam-k gene lines in tomato using pcr and real-time pcr, Postgraduate, S.Uygun(Student), 2010
- GÜLTEKİN G. C., Characterization of lactobacillus delbrueckii subspecies bulgaricus and streptococcus thermophilus as lactic cultures isolated from traditional Turkish yogurts and subtyping of streptococcus thermophilus using crispr analysis and mlst, Doctorate, N.Altay(Student), 2010
- GÜLTEKİN G. C., Molecular identification and typing of lactobacillus delbrueckii subspecies bulgaricus and streptococcus thermophilus, Doctorate, A.Cebeci(Student), 2008
- GÜLTEKİN G. C., Screening for genetically modified tomatoes & tomato seeds and identification of CRY1AC and SAM-K specific modifications using gene and construct specific PCR, Postgraduate, E.Uçkun(Student), 2007
- GÜLTEKİN G. C., Screening of tomato seeds for genetic modification and identification of genetically modified ripening delayed tomato seeds, Postgraduate, S.Türkoğlu(Student), 2007
- GÜLTEKİN G. C., Identification of serotype specific dna marker for salmonella typhimurium by rapd-pcr method, Postgraduate, C.Aksoy(Student), 2004
- GÜLTEKİN G. C., Fatty acid methyl ester analysis of bacterial isolates from salt lake, Turkey and characterization of their extracellular enzymes, Postgraduate, H.Bahçeci(Student), 2004

## Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Diversity of Wild Yeasts During Spontaneous Fermentation of Wines from Local Grape Varieties in Turkey**  
Gurakan G. C., Aktuna I., Seyedmonir E.  
AMERICAN JOURNAL OF ENOLOGY AND VITICULTURE, vol.73, no.4, pp.307-319, 2022 (SCI-Expanded)
- II. **Optimisation of spray drying parameters for Lactobacillus acidophilus encapsulation in whey and gum Arabic: Its application in yoghurt**

Leylak C., Ozdemir K. S., Gurakan G. C., Ogel Z. B.

International Dairy Journal, vol.112, 2021 (SCI-Expanded)

- III. **Change of microbial community composition in anaerobic digesters during the degradation of nonylphenol diethoxylate**  
Murdoch F. K., Murdoch R. W., Gurakan C., Sanin F. D.  
INTERNATIONAL BIODETERIORATION & BIODEGRADATION, vol.135, pp.1-8, 2018 (SCI-Expanded)
- IV. **Comparison of RAPD-PCR and PFGE analysis for the typing of Streptococcus thermophilus strains isolated from traditional Turkish yogurts**  
Ghazi F., Kihal M., Altay N., Gurakan G. C.  
ANNALS OF MICROBIOLOGY, vol.66, no.3, pp.1013-1026, 2016 (SCI-Expanded)
- V. **Recombinant plasmid-based quantitative Real-Time PCR analysis of Salmonella enterica serotypes and its application to milk samples**  
Gokduman K., AVŞAROĞLU ERKAN M. D., Cakiris A., Ustek D., Gurakan G. C.  
JOURNAL OF MICROBIOLOGICAL METHODS, vol.122, pp.50-58, 2016 (SCI-Expanded)
- VI. **Kefir: A Multifaceted Fermented Dairy Product**  
Nielsen B., Gurakan G. C., Uenlue G.  
PROBIOTICS AND ANTIMICROBIAL PROTEINS, vol.6, pp.123-135, 2014 (SCI-Expanded)
- VII. **PHENOTYPIC DIVERSITY AND TECHNOLOGICAL PROPERTIES OF YOGURT CULTURES ISOLATED FROM TRADITIONALLY PRODUCED TURKISH YOGURTS WITH COMPARISON TO COMMERCIAL STARTER CULTURES**  
Dede N. A., Acar-Soykut E., Gurakan G. C.  
ITALIAN JOURNAL OF FOOD SCIENCE, vol.26, no.3, pp.308-316, 2014 (SCI-Expanded)
- VIII. **Comparative typing of L. delbrueckii subsp bulgaricus strains using multilocus sequence typing and RAPD-PCR**  
Cebeci A., GÜLTEKİN G. C.  
EUROPEAN FOOD RESEARCH AND TECHNOLOGY, vol.233, no.3, pp.377-385, 2011 (SCI-Expanded)
- IX. **Qualitative detection of GM maize (Bt 11) in food and feed sold commercially in Turkey by PCR based methods**  
Gurakan G. C., Aydin G., Yilmaz R.  
INDIAN JOURNAL OF BIOTECHNOLOGY, vol.10, no.1, pp.143-146, 2011 (SCI-Expanded)
- X. **Effects of starter culture combinations using isolates from traditional cheese on the quality of Turkish white cheese**  
Kayagil F., GÜLTEKİN G. C.  
INTERNATIONAL JOURNAL OF DAIRY TECHNOLOGY, vol.62, no.3, pp.387-396, 2009 (SCI-Expanded)
- XI. **Molecular methods for identification of Lactobacillus delbrueckii subsp bulgaricus and Streptococcus thermophilus using methionine biosynthesis and 16S rRNA genes**  
Cebeci A., Gurakan G. C.  
JOURNAL OF DAIRY RESEARCH, vol.75, no.4, pp.392-398, 2008 (SCI-Expanded)
- XII. **Monovalent cations and their influence on activated sludge floc chemistry, structure, and physical characteristics**  
Kara F., Gurakan G. C., Sanin F. D.  
Biotechnology and Bioengineering, vol.100, no.2, pp.231-239, 2008 (SCI-Expanded)
- XIII. **Differentiation of Salmonella Typhimurium from Salmonella Enteritidis and other Salmonella serotypes using random amplified polymorphic DNA analysis**  
Gurakan G. C., AKSOY C., Ogel Z. B., Oren N. G.  
POULTRY SCIENCE, vol.87, no.6, pp.1068-1074, 2008 (SCI-Expanded)
- XIV. **Effect of controlled atmosphere storage modified atmosphere packaging and gaseous ozone treatment on the survival of Salmonella Enteritidis on cherry tomatoes**  
DAS E., GÜZİN CANDAN G. C., BAYINDIRLI A.  
Food Microbiology, vol.23, pp.430-438, 2006 (SCI-Expanded)
- XV. **Behavior and control of Listeria innocua during manufacture and storage of Turkish White Cheese**

- OZTURKOGLU S., Gurakan G. C., Alpas H.  
EUROPEAN FOOD RESEARCH AND TECHNOLOGY, vol.222, pp.614-621, 2006 (SCI-Expanded)
- XVI. **Properties of potential probiotic Lactobacillus plantarum strains**  
Cebeci A., Gurakan C.  
FOOD MICROBIOLOGY, vol.20, no.5, pp.511-518, 2003 (SCI-Expanded)
- XVII. **Combined effect of high hydrostatic pressure treatment and hydrogen peroxide on Salmonella Enteritidis in liquid whole egg**  
Isiker G., Gurakan G. C., Bayindirli A.  
EUROPEAN FOOD RESEARCH AND TECHNOLOGY, vol.217, no.3, pp.244-248, 2003 (SCI-Expanded)
- XVIII. **Characterization of Salmonella enteritidis isolates of chicken, egg and human origin from Turkey**  
Icgen B., Gurakan G. C., Ozcengiz G.  
FOOD MICROBIOLOGY, vol.19, pp.375-382, 2002 (SCI-Expanded)
- XIX. **Characterisation of local isolates of Enterobacteriaceae from Turkey**  
Icgen B., Gurakan G. C., Ozcengiz G.  
MICROBIOLOGICAL RESEARCH, vol.157, pp.233-238, 2002 (SCI-Expanded)
- XX. **Effects of plasmid curing on antibiotic susceptibility, phage type, lipopoly saccharide and outer membrane protein profiles in local Salmonella isolates**  
Icgen B., Gurakan G. C., Ozcengiz G.  
FOOD MICROBIOLOGY, vol.18, pp.631-635, 2001 (SCI-Expanded)
- XXI. **Characterization of extracellular beta-lactamases from penicillin G-resistant cells of Streptococcus thermophilus**  
Chirica L., Guray T., Gurakan G. C., Bozoglu F.  
JOURNAL OF FOOD PROTECTION, vol.61, no.7, pp.896-898, 1998 (SCI-Expanded)
- XXII. **Stability of a recombinant plasmid carrying alpha-amylase gene in Bacillus subtilis**  
Gurakan G. C., Bayindirli A., Ogel Z., Tanboga P.  
WORLD JOURNAL OF MICROBIOLOGY & BIOTECHNOLOGY, vol.14, no.2, pp.293-295, 1998 (SCI-Expanded)
- XXIII. **Effects of gamma irradiation on the survival of Listeria monocytogenes and on its growth at refrigeration temperature in poultry and red meat**  
Gursel B., Gurakan G. C.  
POULTRY SCIENCE, vol.76, no.12, pp.1661-1664, 1997 (SCI-Expanded)
- XXIV. **IDENTIFICATION OF LACTOBACILLUS STRAINS FROM TURKISH-STYLE DRY FERMENTED SAUSAGES**  
GURAKAN G. C., BOZOGLU F., WEISS N.  
FOOD SCIENCE AND TECHNOLOGY-LEBENSMITTEL-WISSENSCHAFT & TECHNOLOGIE, vol.28, no.1, pp.139-144, 1995 (SCI-Expanded)

## **Books & Book Chapters**

### **I. Starter Cultures**

Gültekin G. C.

in: Food Science Technology and Engineering, Ertan Anli, Pinar Sanlibaba, Editor, Nobel Yayın Dağıtım, Ankara, pp.1-960, 2022

## **Refereed Congress / Symposium Publications in Proceedings**

### **I. Diversity of wild non-Saccharomyces yeast population in must and wine during spontaneous wine fermentation**

GÜLTEKİN G. C., Aktuna İ., Monir E. S., Cavdaroglu C.

Proceedings of applied Microbiology, Edinburgh, Saint Helena, 12 - 13 November 2018, vol.4, pp.43

### **II. Production of Plain Set-Type Yogurt with Lactobacillus Acidophilus Encapsulated in Whey and Gum**

### **Arabic Mixtures by Spray Drying.**

DEĞİRMENÇİ C., ÖZDEMİR K. S., GÜLTEKİN G. C., ÖGEL Z. B.

1st International Food and Medicine Congress (IFMC 2018), 24 - 27 May 2018

### **III. Metabolizma Penceresinden Genetiği Değiştirilmiş Gıdalar**

GÜLTEKİN G. C.

XIII. Ulusal Metabolik Hastalıklar ve Beslenme Kongresi, Adana, Turkey, 14 - 18 April 2015

### **IV. Behaviour and control of Listeria innocua during manufacturing and storage of Turkish white cheese**

Öztürkoğlu Ş., Gurakan G. C., ALPAS H.

Risk Assessment of Microbial Problems and Preventive Actions in Food Industry - 2nd Open Seminar Arranged by SAFOODNET - Food Safety and Hygiene Networking Within New Member States and Associated Candidate Countries; FP6-022808-2006, İstanbul, Turkey, 22 - 23 October 2007, pp.82-83

## **Supported Projects**

GÜLTEKİN G. C., SEYED MONİR E., Project Supported by Higher Education Institutions, TÜRKİYE'DE YETİŞTİRİLEN DÖRT VİTİS VİNİFERA ÜZÜM ÇEŞİDİNDEKİ ŞARAPLARDAKİ AROMA BİLEŞİKLERİ KARŞILAŞTIRMASI, 2018 - 2019

GÜLTEKİN G. C., SEYED MONİR E., Project Supported by Higher Education Institutions, TÜRKİYE'DE YETİŞTİRİLEN DÖRT VİTİS VİNİFERA ÜZÜM ÇEŞİDİNDEKİ ŞARAPLARDAKİ AROMA BİLEŞİKLERİ KARŞILAŞTIRMASI, 2018 - 2019

GÜLTEKİN G. C., ULUTAŞ M. S., Project Supported by Higher Education Institutions, Geleneksel yoğurtlardan izole edilmiş Lactobacillus delbrueckii subsp. bulgaricus kültürlerinin 16S rDNA sekanslanması ve PFGE metodu ile genotipik farklılıklarının belirlenmesi, 2017 - 2017

GÜLTEKİN G. C., Project Supported by Higher Education Institutions, GELENEKSEL ŞARAP BAĞLANTILI SACCHAROMYCES CEREVISIAE SUŞLARININ MOLEKÜLER KARAKTERİZASYONU, 2017 - 2017

GÜLTEKİN G. C., Project Supported by Higher Education Institutions, FEN BİLİMLERİ ENSTİTÜSÜ/LİSANSÜSTÜ TEZ PROJESİ, 2014 - 2016

GÜLTEKİN G. C., BALCI O., Eyüboğlu Ö., Çetinkaya A., Çavdaroğlu Ç., Project Supported by Higher Education Institutions, Yöre üzümünün yıkama suyundan, must ve geleneksel şaraplarından Saccharomyces cerevisiae izolasyonu, tanı ve PFGE ile tiplendirme, 2014 - 2016

GÜLTEKİN G. C., Project Supported by Higher Education Institutions, FEN BİLİMLERİ ENSTİTÜSÜ/LİSANSÜSTÜ TEZ PROJESİ, 2014 - 2016

GÜLTEKİN G. C., Project Supported by Higher Education Institutions, FEN BİLİMLERİ ENSTİTÜSÜ/LİSANSÜSTÜ TEZ PROJESİ, 2014 - 2015

GÜLTEKİN G. C., Project Supported by Higher Education Institutions, FEN BİLİMLERİ ENSTİTÜSÜ/LİSANSÜSTÜ TEZ PROJESİ, 2014 - 2015

GÜLTEKİN G. C., Project Supported by Higher Education Institutions, FEN BİLİMLERİ ENSTİTÜSÜ/LİSANSÜSTÜ TEZ PROJESİ, 2014 - 2015

GÜLTEKİN G. C., Project Supported by Higher Education Institutions, PFGE yöntemi ile Geleneksel yoğurtlardan izole edilmiş Streptococcus thermophilus kültürlerinin (PFGE) ve RAPD-PCR metodları ile genotipik farklılıklarının belirlenmesi, 2013 - 2013

GÜLTEKİN G. C., Project Supported by Higher Education Institutions, Kefirden İzole Edilen Probiyotik Lactobacillus Acidophilus Suşlarının Rapd-Pcr İle Tiplendirilmesi, 2011 - 2011

GÜLTEKİN G. C., Project Supported by Higher Education Institutions, Süt Ve Süt Ürünlerinde Salmonella Spl.'nin Real - Time Pcr Yöntemi İle Tanısı İçin Kullanılan İki Önemli Gen Bölgesinin Karşılaştırılması, 2010 - 2010

GÜLTEKİN G. C., Project Supported by Higher Education Institutions, Genetik Modifiye (gm) Mısırlarda Etiketleme Gereği "kuantifikasyon", 2009 - 2009

## **Metrics**

Publication: 29  
Citation (WoS): 598  
Citation (Scopus): 579  
H-Index (WoS): 11  
H-Index (Scopus): 9

### **Invited Talks**

Diversity of wild non-Saccharomyces yeast population in mustand wine during spontaneous wine fermentation,  
Conference, United Kingdom, November 2019

### **Non Academic Experience**

Alman Kltr Koleksiyonu, Braunschweig, Almanya